

## 20001

65                      70                      75                      80  
 Arg His Leu Met Arg Leu Trp Leu Ala Thr Pro Glu Asp Ala Gly Gly  
                                  85                      90                      95  
 Trp Trp Leu Leu Ile Ser Pro Ala Trp Lys Lys Cys Ile  
                                  100                      105

&lt;210&gt; 44255

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (33), (35), (38), (48)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44255

Asn Leu Tyr Leu Phe Phe Ser Ser Lys Met Arg Gly Lys Leu His Ile  
 1                      5                      10                      15  
 Val Pro Ser Met Glu Tyr Asn Pro Ser Asn Glu Thr Arg Ile Phe Phe  
                                  20                      25                      30  
 Xaa Gly Xaa Trp Val Xaa Gly Leu Ala Cys Lys Ile Ala Ser Arg Xaa  
                                  35                      40                      45  
 Ser Leu Ser Lys Phe Ala Ile Leu Val Trp Gly Lys Glu Leu Asp Gly  
                                  50                      55                      60  
 Asn  
 65

&lt;210&gt; 44256

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (18), (28), (31), (32), (273), (277), (278)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44256

Leu Pro Ser Ser Ser Phe Pro His Thr Asn Met Ala Asn Leu Glu Arg  
 1                      5                      10                      15  
 Glu Xaa Arg Glu Ala Ile Leu Gln Ala Asn Pro Xaa Thr His Xaa Xaa  
                                  20                      25                      30  
 Trp Lys Lys Ile Leu Val Ser Phe Glu Gly Leu Tyr Ser Met Glu Gly  
                                  35                      40                      45  
 Thr Met Cys Asn Leu Pro Arg Ile Leu Glu Leu Lys Lys Arg Tyr Lys  
                                  50                      55                      60  
 Phe Tyr Phe Phe Val Asp Glu Ala His Ser Ile Gly Ala Ile Gly Leu  
 65                      70                      75                      80  
 Arg Gly Arg Gly Val Cys Asp Phe Phe Lys Val Asp Pro Ala Glu Val  
                                  85                      90                      95  
 Asp Ile Phe Met Gly Thr Phe Thr Lys Ser Phe Gly Ala Asn Gly Gly  
                                  100                      105                      110  
 Tyr Ile Ala Ala Asp Lys Ala Leu Ile Lys Lys Leu Arg Ala Thr Asn  
                                  115                      120                      125  
 Ala Gly Gln Val Phe Gly Glu Ala Pro Ala Pro Ala Val Leu Ala Gln

JCS42 U.S. PTO

09/417507

10/14/99

## 20002

```

      130              135              140
Ile Ser Ser Ser Leu Arg Leu Ile Ala Asp Glu Asp Pro Gln His Pro
145              150              155              160
Gly Gln Gly Leu Glu Arg Val Gln Arg Leu Gly Phe Asn Ser Arg Tyr
      165              170              175
Leu Arg Leu Gly Leu Lys Arg Leu Gly Phe Ile Val Tyr Gly His Asp
      180              185              190
Asp Ser Pro Ile Val Pro Leu Met Leu Tyr Asn Pro Ala Lys Met Pro
      195              200              205
Ala Phe Ser His Glu Met Leu Arg Arg Lys Ile Ser Val Val Val Val
      210              215              220
Thr Tyr Pro Ala Thr Pro Leu Glu Leu Ser Arg Ala Arg Leu Cys Val
225              230              235              240
Ser Ala Ala His Thr Lys Asp Asp Leu Asp His Ile Leu Arg Val Cys
      245              250              255
Asp Glu Ile Gly Asn Thr Leu Gly Leu Thr Tyr Ser Thr Gly Gly Cys
      260              265              270
Xaa Thr Arg Pro Xaa Xaa Ala Arg Asn Gly Arg Gly
      275              280

```

&lt;210&gt; 44257

&lt;211&gt; 238

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44257

```

Leu Pro Val Gly Tyr Thr Thr Val Ala Leu Ser Gln Thr Ile Ser Gly
1              5              10              15
Lys Leu Pro Ser Asn Leu Ala Pro Pro Pro Ala Pro Thr Asn Ala Pro
      20              25              30
Lys Asn Leu Lys Leu Leu Ser Arg Val Asn Leu Met Leu Ser Asp Pro
      35              40              45
Ala Gln Asn Gln Arg Leu Ala Ser Leu Ala Gln Val Tyr Asp Leu Val
      50              55              60
Ala Leu Arg Pro Thr Asn Glu Lys Ala Leu Leu Asn Ala Cys Thr Asn
      65              70              75              80
Leu Glu Cys Asp Leu Ile Ser Leu Asp Leu Ser Val Arg Leu Pro Phe
      85              90              95
Tyr Phe Lys Phe Lys Met Leu Ser Ala Ala Ile Glu Arg Gly Val Arg
      100              105              110
Leu Glu Ile Cys Tyr Gly Pro Gly Val Thr Gly Ser Gly Leu Glu Ala
      115              120              125
Arg Arg Asn Leu Ile Gly Asn Ala Met Ser Leu Ile Arg Ala Thr Arg
      130              135              140
Gly Arg Gly Ile Val Val Ser Ser Glu Ala Lys Arg Ala Leu Gly Val
      145              150              155              160
Arg Ala Pro Trp Asp Val Ile Asn Leu Thr Cys Val Trp Gly Leu Ser
      165              170              175
Gln Glu Leu Gly Lys Glu Ala Ile Ser Glu Glu Ala Arg Lys Val Thr
      180              185              190
Ala Leu Ala Lys Leu Lys Arg Thr Ser Trp Arg Gly Val Ile Asp Ile
      195              200              205
Val Asp Gly Gly Gln Met Ser Lys Ser Gln Val Met Glu Ser Gly Met
      210              215              220
Gly Gln Lys Gly Met Ser Lys Lys Asn Ser Arg Arg Val Arg
225              230              235

```

20003

<210> 44258  
 <211> 208  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (155),(182),(190)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44258  
 Arg Pro Glu Lys Ser Trp Pro Thr Ser Ile Leu Phe Ile Asp Lys Leu  
 1 5 10 15  
 Arg Pro Tyr Val Lys Ser Met Ala Leu Arg Tyr Val Leu Val Gly Leu  
 20 25 30  
 Lys Gln Asn His Thr Leu Gln Leu Trp Asp Ile Gly Leu Gly Lys Ala  
 35 40 45  
 Val Gln Glu Leu Lys Phe Pro His Glu Asn Glu Ser Asp Ala Ile Cys  
 50 55 60  
 Ser Val Ala Tyr His Ala Ala Ser Gly Ile Ile Val Val Gly His Pro  
 65 70 75 80  
 Thr Arg Asn Ser Ile Tyr Phe Val His Leu Ser Ala Pro Arg Tyr Asn  
 85 90 95  
 Leu Gln Pro Met Ser Gln Ala Ser Phe Ile Lys Arg Ser Gly Glu Lys  
 100 105 110  
 Asp Ser Ser Leu Pro Lys Pro Glu Ser Thr Ala Cys Met Ser Gly Ile  
 115 120 125  
 Arg Glu Ile Ser Phe Ala Ser Lys Gly Gln Leu Arg Ser Leu Asp Leu  
 130 135 140  
 Leu Pro Ala Ile Lys Ala Pro Gly Asp Ser Xaa Glu Asn Ser Ala Leu  
 145 150 155 160  
 Phe Glu Leu Tyr Val Met His Ser Arg Gly Val Thr Cys Leu Thr Ile  
 165 170 175  
 Lys Lys Glu Asp Leu Xaa Trp Gly Val Asp Asn Lys Asn Xaa Arg Pro  
 180 185 190  
 Val Asn Ala Leu Glu Glu Gly Tyr Ile Glu Ile Ser Glu Leu Gln Ala  
 195 200 205

<210> 44259  
 <211> 72  
 <212> PRT  
 <213> A.fumigatus

<400> 44259  
 Arg Pro Ser Pro Val His Ser Pro Ser Leu Thr Ala Ser Lys Trp Trp  
 1 5 10 15  
 Ile Gly Ser Leu Gly Arg Ser Ala Tyr His Ala Val Val Met Ala Gln  
 20 25 30  
 Leu Phe Ile Ala Gly Lys Asn Tyr Gly Pro His Pro Phe Ile Val Gln  
 35 40 45  
 Ile Arg Asp Leu Glu Thr His Gln Pro Leu Glu Asn Ile Tyr Val Gly  
 50 55 60  
 Asp Ile Gly Pro Lys Phe Gly Tyr  
 65 70

20004

<210> 44260  
 <211> 74  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (11), (12), (13)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44260  
 Ile Pro Phe Leu Glu Ala Arg Pro Val Gln Xaa Xaa Xaa Gly Asn Gly  
 1 5 10 15  
 Met Cys Lys Ser Ala Ile Gln Lys Arg Ile Ser Val Arg Gly Ser Asn  
 20 25 30  
 Gly Glu Lys Asp His Phe Arg Tyr Leu Ser Val Pro Asp Ser Glu Leu  
 35 40 45  
 Ile Glu Tyr Ala Gln Gly Leu Leu Ser Gly Tyr Leu Glu Glu Ala  
 50 55 60  
 Phe Met Tyr Val Ile Glu Trp Glu Trp Lys  
 65 70

<210> 44261  
 <211> 218  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (200)  
 <223> Identity of amino acid sequences at the above locations are unknown.

<400> 44261  
 Phe Gly Val Glu Met Gly Gly Thr Thr Ala Val Phe Lys Ala Leu Trp  
 1 5 10 15  
 Lys Thr Leu Trp Gln Tyr Phe Ala Gly Ile Gly Ile Pro Gly Trp Gln  
 20 25 30  
 Leu Ile Arg Gln Asp Tyr Asn Leu Asn Phe Glu Thr Tyr Val Pro His  
 35 40 45  
 Ser Ile Asn Trp Ala Trp Gly Ser Met Val Pro Glu Tyr Asp Ala Val  
 50 55 60  
 Ala Arg Lys Ala Ile Glu Leu Ile Ala Pro Ile Pro Leu Glu Gly Ser  
 65 70 75 80  
 Val Pro Asp Ala Thr Val Arg Glu Val Ile Glu Phe Ser Asn Ser Val  
 85 90 95  
 Lys Arg Val Ala Val Asp Ser Asn Arg Phe Asn Phe Arg Trp Asp Gly  
 100 105 110  
 Leu Leu Arg Tyr Tyr Asp Ile Phe Leu Asn Tyr Asp Glu Lys Lys Asn  
 115 120 125  
 Trp Lys Asp Val Phe Ser Arg Gln Cys Lys Gly Cys Gly Ala Trp Leu  
 130 135 140  
 Val Cys Arg Pro Asp Trp Arg Lys Cys Tyr Ser Cys Gly Lys Glu Arg  
 145 150 155 160  
 Thr Glu Glu Glu Ala Ala Ile Ala Trp Asn Pro Pro Leu Ala Val Asp  
 165 170 175  
 Glu Val Lys Ala Leu Val Arg Ala Ser Asp Ala Lys Pro Ala Ser Arg

## 20005

	180		185		190										
Ala	Ala	Lys	Glu	Arg	Ala	Val	Xaa	Glu	Gln	Leu	Lys	Asp	Gly	Thr	Val
	195		200		205										
Val	Val	Ser	His	Ala	Val	Glu	Ile	Thr	Val						
	210				215										

&lt;210&gt; 44262

&lt;211&gt; 133

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44262

Arg	Trp	Ile	Ser	Thr	Ala	Gly	Glu	Tyr	Ala	Arg	Phe	His	Asp	Arg	Glu
1			5					10					15		
Gly	Asp	Lys	Lys	Thr	Asn	Arg	Gln	Thr	Leu	Pro	Val	Ile	Val	Gly	Pro
	20						25						30		
Arg	Trp	His	Gly	Ala	Leu	Arg	Trp	Ala	Thr	Ala	Leu	Leu	Val	Met	Gly
	35						40					45			
Thr	Gly	Ile	Met	Pro	Leu	Cys	Ile	Thr	Gly	Lys	Leu	Val	Trp	Asn	Gly
	50					55					60				
Gln	Asp	Thr	Gly	Phe	Arg	Asn	Lys	Arg	Trp	Ile	Tyr	Thr	Gly	Thr	Val
65					70				75						80
Ile	Thr	Ala	Ile	Leu	His	Val	Val	Phe	Ala	Ser	Leu	Ser	Gly	Leu	Arg
				85				90						95	
Cys	Ala	Phe	Ser	Trp	Gly	Glu	Ala	Ala	Tyr	Asp	Arg	Gln	Thr	Tyr	Lys
	100						105					110			
Arg	Phe	Tyr	Met	Leu	Ala	Ala	Tyr	Thr	Met	Val	Cys	Tyr	Leu	Ser	Phe
	115						120					125			
Ala	Tyr	Leu	Thr	Ala											
	130														

&lt;210&gt; 44263

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44263

Val	His	Val	Ala	Gln	Cys	Cys	Thr	Leu	Phe	Leu	Ser	Leu	Asn	Val	His
1				5					10					15	
Glu	Gly	His	Pro	Lys	Ser	Met	Thr	Lys	Val	Ile	Ile	Ala	Gly	Val	Thr
	20							25					30		
Gly	Phe	Val	Gly	Gln	Glu	Val	Leu	Ser	Gln	Cys	Leu	Ala	His	Pro	Ser
	35						40					45			
Ile	Thr	Ser	Ile	Val	Ala	Leu	Cys	Arg	Arg	Glu	Leu	Pro	Thr	Thr	His
	50					55					60				
Pro	Lys	Leu	His	Val	His	Gly	Thr	Gln	Glu	Arg	Asp	Phe	Leu	Ser	Tyr
65					70				75						80
Ser	Asp	Pro	Gln	Leu	Thr	Ala	Ser	Leu	Arg	Gly	Ala	Gly	Ser	Cys	Ile
			85					90						95	
Trp	Thr	Pro	Gly	Ile	Thr	Pro	Ser	Arg	Ala	Ser	Asp	Glu	Gln	Thr	Leu
	100							105					110		
Arg	Pro	Val	Thr	Leu	Glu	Leu	Tyr	Ser	Gln	Ala	Ala	Lys	Gly	Phe	Gln
	115						120					125			
Gln	Cys	Leu	Tyr	Cys	Phe	Gln	Met	Lys	Ala	Asn	Lys	Glu	Ala	Leu	Pro
	130					135					140				
Gly	Ser	Lys	Phe	Pro	Phe	Gly	Val	Cys							

145

150

&lt;210&gt; 44264

&lt;211&gt; 202

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (5), (6), (8), (21)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44264

Arg	Thr	Val	Phe	Xaa	Xaa	Ala	Xaa	Asp	Ser	Phe	Val	Ser	Gly	Val	Val
1				5					10					15	
Pro	Gly	Gly	Phe	Xaa	Thr	Ala	Ser	Thr	Tyr	Pro	Leu	Asp	Leu	Leu	Arg
			20					25					30		
Thr	Arg	Phe	Ala	Ala	Gln	Gly	Thr	Glu	Arg	Ile	Tyr	Thr	Ser	Leu	Leu
		35					40					45			
Ala	Ser	Val	Arg	Asn	Ile	Ala	Arg	Ser	Glu	Gly	Pro	Ala	Gly	Phe	Phe
		50				55					60				
Arg	Gly	Cys	Ser	Ala	Ala	Val	Gly	Gln	Ile	Val	Pro	Tyr	Met	Gly	Leu
65					70					75					80
Phe	Phe	Ala	Thr	Tyr	Glu	Ser	Leu	Arg	Pro	Val	Leu	Ser	Gly	Leu	Glu
				85					90					95	
Asn	Met	Pro	Phe	Gly	Ser	Gly	Asp	Ala	Ala	Ala	Gly	Val	Ile	Ala	Ser
			100					105					110		
Val	Leu	Ala	Lys	Ser	Gly	Val	Phe	Pro	Leu	Asp	Leu	Val	Arg	Lys	Arg
		115					120					125			
Leu	Gln	Val	Gln	Gly	Pro	Thr	Arg	Thr	Leu	Tyr	Val	His	Arg	Asn	Ile
	130					135					140				
Pro	Glu	Tyr	Arg	Gly	Val	Phe	Ser	Thr	Ile	Ala	Met	Ile	Val	Arg	Thr
145					150					155					160
Gln	Gly	Val	Arg	Gly	Leu	Tyr	Arg	Gly	Leu	Thr	Val	Ser	Leu	Ile	Lys
				165					170					175	
Ala	Ala	Pro	Ala	Ser	Ala	Ile	Thr	Met	Trp	Thr	Tyr	Glu	Arg	Ser	Leu
			180					185					190		
Lys	Leu	Leu	Arg	Asp	Phe	Arg	Val	Ala	Glu						
	195						200								

&lt;210&gt; 44265

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44265

Leu	Ile	Thr	Lys	Asp	Cys	Cys	Ala	Thr	Val	Gly	Met	Ala	Ala	Asn	Arg
1				5					10					15	
Asn	His	Gln	Tyr	Arg	Gln	Leu	Gly	Lys	Ala	Gly	Arg	Ala	Arg	Trp	Leu
		20						25					30		
Asn	Ile	Gly	Pro	Thr	Val	Arg	Gly	Val	Ala	Met	Asp	Ala	Ala	Asp	His
		35					40					45			
Pro	His	Gly	Gly	Gly	Arg	Gly	Lys	Ser	Lys	Gly	Asn	Val	Asp	Pro	Lys
	50					55					60				
Ser	Pro	Trp	Gly	Leu	Pro	Val	Cys	Thr	Cys	Val	Ile	Ala	Gly	Leu	Asn
65					70					75					80

20007

Ala Leu

<210> 44266  
 <211> 96  
 <212> PRT  
 <213> A.fumigatus

<400> 44266  
 His Val Leu Leu Leu Phe Ser Ser Ser Leu Tyr Ser Ser Ile Leu Met  
 1 5 10 15  
 Phe Lys Cys Gly Gly Trp Val Leu Arg Ser His Cys Ile Ile Phe Cys  
 20 25 30  
 Leu Asp Ser Gly Ala Arg His Ala Val Phe Asp Ile Leu Gln Thr Ser  
 35 40 45  
 Cys Asp Tyr Tyr Leu Ala Val Met Asp Asp Arg Leu Tyr Phe His Thr  
 50 55 60  
 Phe Ala Met Ala Ile Thr Phe Met Arg Ser Lys Tyr Thr Glu Phe Thr  
 65 70 75 80  
 Gly Glu Lys Asp Leu Phe Val Tyr Thr Pro Gly Trp Thr Ile Arg Arg  
 85 90 95

<210> 44267  
 <211> 139  
 <212> PRT  
 <213> A.fumigatus

<400> 44267  
 Val Ile Ala Asp Gln Phe Leu Ser Leu Val Leu Ala Asp Ile Ser Arg  
 1 5 10 15  
 Ser Thr Gly Leu Pro Asn Phe Arg Phe Lys Leu Pro Ser Arg Asn Trp  
 20 25 30  
 Met Ile Phe Phe Thr Ile Thr Gly Ser Leu Thr Ala Ala Ile Val Tyr  
 35 40 45  
 Asp Arg Arg Glu Arg Arg Arg Val Gln Gln Lys Trp Cys Asp Leu Val  
 50 55 60  
 Ala His Leu Ser Lys Glu Thr Leu Pro Ile Glu Gln Thr Arg Arg Lys  
 65 70 75 80  
 Leu Thr Ile Phe Leu Ser Ala Pro Pro Gly Asp Gly Leu Arg Ile Ala  
 85 90 95  
 Arg Glu His Phe Lys Glu Tyr Val Lys Pro Ile Leu Val Ala Ala Ala  
 100 105 110  
 Leu Asp Tyr Thr Val Ile Glu Gly Arg Arg Glu Gly Asp Val Arg Ala  
 115 120 125  
 Ala Leu Val Phe Thr Thr Ala Glu Asn Pro Pro  
 130 135

<210> 44268  
 <211> 279  
 <212> PRT  
 <213> A.fumigatus

<220>  
 <221> UNSURE  
 <222> (7), (9)  
 <223> Identity of amino acid sequences at the above locations are unknown.

20008

<400> 44268

```

Ala Trp Ile Trp Pro Arg Xaa Asp Xaa Ile Tyr Asn Gly Pro Glu Arg
1          5          10          15
Ser Cys Arg Ala Tyr Asp Arg Asp Leu Val Ser Val Ala Lys Lys Arg
          20          25          30
Gly Phe Ser Tyr Leu Asp Asp Arg Lys Gly Phe Asp Ser Leu Asn Gly
          35          40          45
Gly Ser Glu Ala Lys Leu Pro Leu Leu Gly Leu Phe Ala Glu Lys Asp
          50          55          60
Ile Pro Phe Glu Ile Asp Arg Arg Asn Gln Asn Asp Val Tyr Pro Ser
65          70          75          80
Leu Glu Glu Met Ala Arg Thr Ala Leu Lys Ile Leu Ser Asp Ala Thr
          85          90          95
Ala Asp Ser Glu Gln Gly Phe Phe Leu Met Ile Glu Gly Ser Arg Ile
          100          105          110
Asp His Ala Gly His Gly Asn Asp Pro Ala Ala Gln Val His Glu Val
          115          120          125
Ile Ala Tyr Asp Lys Ala Phe Ala Ala Val Leu Asp Phe Leu Gly Lys
          130          135          140
Asp Ser Thr Pro Gly Val Val Val Ser Thr Ser Asp His Glu Thr Gly
145          150          155          160
Gly Leu Ala Ala Ala Arg Gln Leu His Thr Ser Tyr Pro Glu Tyr Lys
          165          170          175
Trp Leu Pro Gly Val Leu Ala Asn Ala Ser His Ser Thr Glu Tyr Ile
          180          185          190
Asp Asn Lys Leu Arg Glu Phe Leu Ser Thr Glu Thr Glu Lys Asn Lys
          195          200          205
Gln Gln His Tyr Val Arg Glu Leu Leu Glu Lys Gly Leu Ser Ile Thr
          210          215          220
Asp Ala Thr Asp Glu Glu Ile Asp Ser Ile Leu Asp Pro Asn Ser Pro
225          230          235          240
Val Ser Ser Gln Tyr Gln Leu Ala Asp Leu Ile Ile Pro Lys Ala Gln
          245          250          255
Ile Gly Trp Ser Thr His Gly Pro Ser Gly Lys Phe Gln Ala Leu Tyr
          260          265          270
His Gly Pro Met Glu Ile Arg
          275

```

<210> 44269

<211> 114

<212> PRT

<213> A.fumigatus

<400> 44269

```

Tyr Arg Leu Arg Leu Gly Glu Trp Gly Phe Trp Cys Leu Gly Val Gln
1          5          10          15
His Arg Leu Val Thr Leu Ile Thr Leu Phe Ala Leu Val Pro Leu Leu
          20          25          30
Leu Phe Ile Val Leu Ala Ala Leu Ile Tyr Arg Gln Ala Gly Arg Val
          35          40          45
Trp Ile Gly Phe Ser Gln Pro Gly Ile Cys Gly Ala Phe His Arg Thr
          50          55          60
Gly Ala Arg Thr Val Asn Lys Arg Ser Ile Ser Pro Ile Ser Trp Arg
65          70          75          80
Glu His Asp Leu Leu Pro Ala Ser Leu Pro Lys Thr Leu Gly Leu Ala

```



## 20009

85 90 95  
 Leu Gly Arg Arg Trp Ala Cys Phe His Thr Arg Arg Leu Glu Gly Pro  
 100 105 110  
 Thr Met

&lt;210&gt; 44270

&lt;211&gt; 137

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (10)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44270

Ile Phe Gly Pro Ser Gly Gly Leu Leu Xaa Ser Arg Ser Ser Leu Cys  
 1 5 10 15  
 Pro Lys Leu Gly Thr Trp Thr Ser Arg His Gly Arg Val Val Ile Val  
 20 25 30  
 Gly Asp Ala Ala His Ala Ile Pro Pro Ala Ala Gly Gln Gly Val Asn  
 35 40 45  
 Gln Ala Phe Glu Asp Val Phe Thr Tyr Ser Leu Met Leu Gly Arg Ser  
 50 55 60  
 Asp Lys Asp Ala Leu Ala Arg Ser Leu Lys Val Trp Gln Thr Arg Arg  
 65 70 75 80  
 Gln Glu Arg Ile Asp Lys Val Leu Ala Leu Asn Thr Tyr Met Glu Arg  
 85 90 95  
 Arg Arg Val Pro Ser Leu Glu Glu Glu Lys Asp Ala Glu Asp Ala Pro  
 100 105 110  
 Leu Asp Phe Ala Ser Leu Tyr Lys Pro Asp Phe Val Glu Ile Val Asp  
 115 120 125  
 Thr Trp Leu Ser Lys His Thr Ser Cys  
 130 135

&lt;210&gt; 44271

&lt;211&gt; 67

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44271

Ile Ile Thr His Ile Thr Trp Tyr Arg Gln Ser Leu Val Gly Ser Arg  
 1 5 10 15  
 Pro Ser Gly Lys Ala Trp Gly Leu Pro Ala Ser Arg Leu Pro Ile Thr  
 20 25 30  
 Thr Thr Glu Cys Ala Arg Ser Val Tyr Ile Ala His Lys Cys Ser Ser  
 35 40 45  
 Glu Gly Ala Ile Arg Val Tyr Glu Leu Asp Glu Lys Thr Ser Ala Phe  
 50 55 60  
 Arg Gly Ser  
 65

&lt;210&gt; 44272

&lt;211&gt; 103

&lt;212&gt; PRT

## 20010

&lt;213&gt; A.fumigatus

&lt;400&gt; 44272

```

Leu Ala Arg Leu Pro Gly Gly Val Asn Ile Val Gly Arg Asp Gln Ser
1          5          10          15
Ala Arg Asn Cys Gln Val Ala Pro His Lys Cys Glu Arg Ile Asn Leu
          20          25          30
Phe Ser Gly Lys Pro Cys Asn Ser Val Phe Ser Arg Pro Tyr Asp Phe
          35          40          45
Thr Arg His Gly Asp Thr Ile His Tyr Ala Arg Lys Gln Lys Val Arg
          50          55          60
Cys His Leu Cys Thr Glu Glu Lys Thr Phe Ser Arg Asn Asp Ala Leu
65          70          75          80
Thr Arg His Met Arg Val Val His Pro Glu Val Asp Trp Arg Gly Lys
          85          90          95
Gln Arg Arg Arg Gly Arg Asp
          100

```

&lt;210&gt; 44273

&lt;211&gt; 62

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44273

```

Thr Asp His Glu Thr Cys His Val Ile Ser Val Tyr Ile His Pro Leu
1          5          10          15
Ser Thr Tyr Pro Asn Thr Asp Ser Pro Thr Asn Lys Leu Asn Asn Thr
          20          25          30
Ser Gln Asp Glu Pro Ala Phe Ala Ala Ser Gln Ile Ile Tyr Arg Gly
          35          40          45
Val Leu Arg Ile His His Ser Pro Val Phe Val Pro Met Pro
          50          55          60

```

&lt;210&gt; 44274

&lt;211&gt; 225

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (7)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44274

```

Val Ala Gly Ser Phe Ser Xaa Pro Trp Arg Glu Lys Cys Asn Cys Arg
1          5          10          15
Ala Ser Arg Ser Phe Pro Phe Val Ser Lys Val Met Gly Val Asp Leu
          20          25          30
Ile Glu Met Ala Thr Lys Ala Met Ile Gly Lys Pro Phe Ala Glu Tyr
          35          40          45
Pro Pro Val Thr Ile Pro Lys Asn Tyr Val Gly Val Lys Val Pro Gln
          50          55          60
Phe Ser Phe Ser Arg Leu Ser Gly Ala Asp Pro Val Leu Gly Val Glu
65          70          75          80
Met Ala Ser Thr Gly Glu Val Ala Ser Phe Gly Arg Asp Lys Tyr Glu
          85          90          95

```

## 20011

Ala Tyr Leu Lys Ala Leu Ile Ser Thr Gly Phe Arg Leu Pro Lys Lys  
 100 105 110  
 Asn Val Leu Phe Ser Ile Gly Ser Tyr Lys Glu Lys Met Glu Met Leu  
 115 120 125  
 Pro Ser Ile Lys Lys Leu His Gln Leu Gly Phe Asn Leu Phe Ala Thr  
 130 135 140  
 Ser Gly Thr Ala Asp Phe Leu Lys Glu His Gly Val Pro Val Lys Tyr  
 145 150 155 160  
 Leu Glu Val Leu Pro Gly Gln Glu Asp Asp Leu Lys Ser Glu Ser Ser  
 165 170 175  
 Leu Thr Gln His Leu Ala Asn Asn Leu Ile Asp Leu Tyr Ile Asn Leu  
 180 185 190  
 Pro Ser Asn Asn Arg Phe Arg Arg Pro Ala Asn Tyr Met Ser Lys Ser  
 195 200 205  
 Tyr Arg Thr Arg Arg Met Ala Val Asp Tyr Gln Thr Leu Leu Gly Thr  
 210 215 220  
 Thr  
 225

&lt;210&gt; 44275

&lt;211&gt; 187

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44275

Lys Pro Xaa Lys Arg Pro Asn Pro Arg Thr Gly Ala Asp Pro Pro Val  
 1 5 10 15  
 Val Val Arg Gly Ala Leu Tyr Ala Gly Gly Pro Ser Asp Ser Ser Ile  
 20 25 30  
 Tyr Gln Tyr Gly Gly Thr Val Ser Tyr Thr Asn Thr Ser Phe Pro Gly  
 35 40 45  
 Phe Gln Asn Pro Thr Ser Ser Glu Tyr Ala Leu Trp Ser Tyr Asn Thr  
 50 55 60  
 Ser Asn Gly Ser Trp Asp Gln Phe Asp Val Thr Leu Gly Ala Glu Tyr  
 65 70 75 80  
 Arg Pro Ala Gly Gly Ala Tyr Gly Glu Ala Pro Asp Gln Glu Leu Ala  
 85 90 95  
 Phe Tyr Leu Asn Gly Tyr Ile Asn Asn Gly Thr Ser Asn Asp Leu Glu  
 100 105 110  
 Asp Ser Asp Asp Leu Leu Arg Tyr Leu Asp Gly Leu Ile Val Ile Asp  
 115 120 125  
 Thr His Thr Gln Met Ala Thr Asn Ile Ser Thr Ser Ser Leu Ala Asn  
 130 135 140  
 Phe Pro Arg Val Arg Gly Gly Met Val Tyr Ile Pro Gly Ile Gly Pro  
 145 150 155 160  
 Lys Gly Ile Leu Val Ala Val Gly Gly Val Thr Lys Ser Ala Ser Asp  
 165 170 175  
 Gly Ser Ala Ser Glu Gly Thr Tyr Val Gly  
 180 185

&lt;210&gt; 44276

20012

<211> 187  
<212> PRT  
<213> A.fumigatus

<400> 44276

Tyr	Asp	Tyr	Ala	Arg	Met	Leu	Gly	Pro	Pro	Ser	Trp	Met	Lys	Thr	Asp
1				5					10					15	
Thr	Ala	Ser	Val	Pro	Met	Pro	His	Gly	Ala	Met	Ser	Leu	Gly	Gln	Ser
			20					25					30		
Gln	Thr	Glu	Pro	Arg	Thr	Met	Ser	Pro	Lys	Asp	Ala	Val	Leu	Asp	Phe
		35				40					45				
Asn	Glu	Thr	Glu	Asp	Ala	Ser	Met	Pro	Pro	Leu	Phe	Pro	Ser	Ser	Gln
	50					55				60					
Pro	Asp	Phe	Asn	Leu	Ser	Glu	Ala	Leu	Gly	Leu	Arg	Arg	Glu	Ser	Ser
65				70					75					80	
Ser	Ser	Leu	Arg	Gln	Ala	Gln	Asn	Phe	Pro	Ser	Met	Asp	Ser	Phe	Ser
			85					90					95		
Ser	Gln	Phe	Asn	Thr	Gln	Thr	Ser	Ser	Leu	Ser	Gln	Gln	Tyr	Pro	Phe
		100					105					110			
Val	Gln	Gln	Gln	Gln	Asn	His	Arg	Gln	Pro	Gln	Leu	Gln	Gln	Gln	Gln
	115					120					125				
Asn	Asn	Leu	Leu	His	His	Thr	Pro	Glu	Phe	Pro	Ala	Ser	Leu	Pro	His
	130					135					140				
Leu	Asp	Ser	Thr	Gly	Ser	Glu	Val	Ile	Gln	Asn	Asp	Met	Thr	Ser	Ser
145				150					155					160	
Gln	Ser	Asn	Met	Asn	Ile	Leu	Pro	Leu	Lys	Gly	Glu	Ile	Thr	Arg	Pro
			165					170						175	
Asp	Asn	Thr	Ser	Thr	Asp	Gly	Gly	Thr	Tyr	Thr					
		180						185							

<210> 44277  
<211> 182  
<212> PRT  
<213> A.fumigatus

<400> 44277

Asn	Lys	Gly	Gly	Gly	Val	Ile	Gln	Val	Ser	Ala	Ser	Asp	Ala	Val	Ala
1				5					10					15	
Thr	Val	Met	Ile	Ala	Ala	Arg	Glu	Arg	Arg	Val	Arg	Glu	Gln	Ala	Leu
		20					25						30		
Ala	Glu	Gly	Leu	Lys	Asp	Gly	Thr	Val	Glu	Tyr	Glu	Asp	Arg	Val	Met
	35					40					45				
Glu	Leu	Arg	Pro	Arg	Leu	Val	Ala	Leu	Gly	Ser	Asn	Gln	Ala	His	Ser
	50				55					60					
Ser	Thr	Ala	Lys	Gly	Ala	Leu	Leu	Ala	Gly	Thr	Arg	Tyr	Arg	Ser	Val
65				70					75					80	
Thr	Ala	Arg	Leu	Glu	Asp	Asn	Met	Glu	Met	Thr	Gly	Pro	Arg	Leu	Arg
		85						90					95		
Glu	Val	Leu	Glu	Gln	Cys	Asp	Lys	Asp	Gly	Leu	Thr	Pro	Tyr	Tyr	Ile
	100					105						110			
Thr	Leu	Gly	Met	Gly	Thr	Thr	Asn	Thr	Cys	Ala	Leu	Asp	Arg	Phe	Ala
	115				120						125				
Glu	Ile	Lys	Ala	Val	Leu	Lys	Glu	Lys	Pro	His	Trp	Gln	Arg	Ile	Trp
	130				135					140					
Val	His	Ile	Asp	Ala	Ala	Tyr	Ala	Gly	Ala	Ala	Leu	Val	Ala	Asp	Glu
145				150					155						160

## 20013

Trp Gln Tyr Ile Ala Lys Asp Phe Ala Glu Gly Ser Ser Pro Arg Gly  
                   165                  170                  175  
 Trp Lys Val Thr Arg Ser  
                   180

<210> 44278  
 <211> 117  
 <212> PRT  
 <213> A.fumigatus

<400> 44278  
 Gly Gln Ser Tyr Ile Ser Tyr Leu Pro Tyr Ala Asn Lys Glu Ser Pro  
 1                  5                  10                  15  
 Lys Ile Asn Ile Ile His Ala Gln Arg Ser Ile Gln His His Phe His  
                   20                  25                  30  
 Ile Thr Asp Asn Asp Trp Thr Leu Asn Leu Ile Ser Pro Ile Tyr Pro  
                   35                  40                  45  
 Ser Ala Ser Phe Ala Ile Leu Ile Val Pro Tyr Lys Asp Cys Cys Gln  
                   50                  55                  60  
 Leu Cys Arg His Asp Ser Glu Arg Met Trp Ser Arg Leu Leu Leu Ala  
 65                  70                  75                  80  
 Asn Pro Lys Gln Leu Leu Phe Tyr His Cys Cys Gly Lys Ile Tyr Gly  
                   85                  90                  95  
 Thr Leu Asn Ile Leu Arg Val Ala His Thr Lys Leu Tyr Ser Glu Arg  
                   100                  105                  110  
 Ile Asn Thr His Arg  
                   115

<210> 44279  
 <211> 63  
 <212> PRT  
 <213> A.fumigatus

<400> 44279  
 Thr Met Ile Ile Ala Arg Phe Phe Asn Gly Leu Ser Gly Ser Ala Phe  
 1                  5                  10                  15  
 Leu Ser Val Ala Gly Gly Thr Val Gly Asp Leu Phe His Arg Gln Glu  
                   20                  25                  30  
 Leu Ala Ala Leu Met Met Val Tyr Thr Ala Ser Pro Phe Leu Val Pro  
                   35                  40                  45  
 Glu Ile Gly Leu Val Leu His Ala Arg Arg Trp Lys Pro Leu Gly  
                   50                  55                  60

<210> 44280  
 <211> 95  
 <212> PRT  
 <213> A.fumigatus

<400> 44280  
 Thr Arg Phe Leu Pro Ser Arg Leu Glu Asp Ala Ala Val Val Thr Val  
 1                  5                  10                  15  
 Lys Pro Gly Gly Met Arg Glu Ile His Trp His Pro Thr Ser Asp Glu  
                   20                  25                  30  
 Trp Ala Phe Phe Ile Arg Gly Gln Gly Arg Ala Thr Leu Phe Ser Ala  
                   35                  40                  45  
 Pro Ser Thr Ala Thr Thr Phe Asp Tyr Arg Ala Gly Asp Val Gly Tyr

## 20014

50					55					60					
Phe	Pro	Lys	Ser	Asn	Ser	His	Tyr	Ile	Glu	Asn	Thr	Gly	Asp	Glu	Asp
65					70					75					80
Leu	Leu	Phe	Leu	Glu	Val	Leu	Gln	Ala	Asp	Lys	Phe	Thr	Gly	Ala	
				85					90					95	

&lt;210&gt; 44281

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (2), (20), (29), (30), (43), (46)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44281

Thr	Xaa	Pro	Phe	Pro	Gly	Arg	Arg	Pro	Val	Gln	Gly	Arg	Glu	Ser	Phe
1				5					10					15	
Leu	Ala	Leu	Xaa	Val	Arg	Met	Ala	Phe	Ser	Gln	Gly	Xaa	Xaa	Arg	Glu
			20					25					30		
Pro	Ser	Leu	Phe	Arg	Ser	Ser	His	Met	Asp	Xaa	Val	Gln	Xaa	Glu	Thr
		35					40					45			
Leu	Arg	Arg	Leu	Trp	His	Gln	Ile	Cys	His	Leu	Asp	Phe	Arg	Ser	Ala
	50					55					60				
Glu	Gly	Arg	Gly	Gln	Glu	Pro	Thr	Ile	Ala	Asp	Glu	Asp	Tyr	Thr	Thr
65					70					75				80	
Leu	Leu	Pro	Arg	Asn	Ile	Asn	Asp	Glu	Asp	Leu	Ile	Glu	Gly	Ala	His
				85					90					95	
Pro	Thr	Ala	Glu	Thr	Tyr	Ser	Pro	Pro	Gly	Phe	Thr	Asp	Met	Thr	Gly
		100					105						110		
His	Leu	Ile	Arg	Leu	His	Gly	Ile	His	Cys	Phe	Arg	Arg	Ile	Val	Arg
	115					120						125			
Ser	Thr	Tyr	Arg	Leu	Glu	Arg	Arg	Ile	Lys	Ser	Ser	Val	Ala	Asn	Gly
	130					135					140				
Asn	Gly	Asn	Leu	Tyr	Pro	Ile	Ala	Glu	Leu	Gln	Ser	Leu	Phe	Val	Glu
145				150					155						160
Val	Arg	Thr	Met	Val	Asp	Glu	Met	Val	Asn	His	Leu	Gln	Thr	Gln	Tyr
			165					170						175	
Leu	Gln	Tyr	Cys	Asp	Pro	Gln	Ile	Pro	His	Gln	Arg	Met	Ala	Leu	Gly
		180						185					190		
Leu	Ala	Ala	Val	Ile	Glu	Trp	Arg	Cys	Trp	Ser	Ile	Phe	Trp	Leu	Arg
	195					200						205			
Thr	Pro	Lys	Gln	Tyr	Arg	Glu	Ala	Val	Val	Ser	Pro	Glu	Ile	Arg	Gln
	210				215						220				
Thr	Tyr	Val	Trp	Cys	Cys	His	Trp	Ser	Arg	Glu	Arg	Leu	Phe	Ser	Cys
225				230						235					240
Leu	Gly	Ala	Lys	Ala	Asn	Glu	Cys	Val							
				245											

&lt;210&gt; 44282

&lt;211&gt; 77

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

20015

<221> UNSURE

<222> (39),(48)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 44282

```
Ala Ile Leu Ile Met Glu Asn Ile Glu Ser Pro His Ser Asp Thr Pro
1           5           10           15
Gln Ile Asn Ile Arg Thr Tyr Leu Val Ile Leu Ile Lys Lys Thr Ala
          20           25           30
Gly Ser His Ile Phe Ile Xaa Phe Ala His Leu Thr Leu Ala Asn Xaa
          35           40           45
Thr Pro His Ile Trp Gly Asp Phe Ile Leu Lys Gly Arg Thr Asp Ser
          50           55           60
Glu Ser Leu Ser Ala Ser Asp Met Leu Cys Val Leu Glu
65           70           75
```

<210> 44283

<211> 99

<212> PRT

<213> A.fumigatus

<400> 44283

```
Cys Phe Phe Leu Gln Cys His Met Arg Pro Pro Ile His Ala Phe His
1           5           10           15
Leu Leu Leu Leu Arg Ser Glu Val Gln Ala Ser Phe Pro Ile Glu Cys
          20           25           30
Gly Glu Met Thr Thr His Thr Leu Pro Lys Gln Arg Met Arg Leu Val
          35           40           45
Ala Asp Arg Ala Arg Thr Ala Gln Cys Met Trp Phe Gly Ile Ile Tyr
          50           55           60
Leu Ala Leu Phe Thr Pro His Ile Leu Cys Tyr Ser Trp Ala Thr Gly
65           70           75           80
Ala Glu Pro Leu Ala Ser Leu Gly Ser Asp Ser Thr Met Ala Phe Asp
          85           90           95
Gln Lys Pro
```

<210> 44284

<211> 157

<212> PRT

<213> A.fumigatus

<400> 44284

```
Ala Ala Gln Ser Lys Glu Leu Asn Tyr Ala Asp Ser Ile His Asp Leu
1           5           10           15
Ala Tyr Gly Asn Val Ala Ala Ser Ser Val Asp Ser Arg Gly Asp Val
          20           25           30
Trp Leu Asn Leu Thr Gly Phe Ala Val Asn Glu Leu Pro Tyr Ile Gln
          35           40           45
Glu Ala Val Gly Ile Thr Ser Leu Asp Asn Ala Arg Glu Leu Gln Val
          50           55           60
Ile Ala Gly Leu Val Ser Thr Ala Ala Ser Gln Gln Gln Trp Gly Asp
65           70           75           80
Val Val Phe Leu Tyr Asn Val Phe Ser Met Asn Ala His Pro Glu Phe
          85           90           95
Ala Arg Val Val Ser Pro Gln Met Gln Ala Gly Leu Leu Asp Ala Val
```

## 20016

100 105 110  
 Arg Asp Arg Ala Ser Asn Ala Gly Pro Asp Asp Arg Leu Ile Glu Leu  
 115 120 125  
 Tyr Ala Ser Thr Ser Ser Ser Pro Ser Leu Val Glu Ala Phe Arg Ala  
 130 135 140  
 Leu Pro Asp Leu His Pro Gly Ala Gly Arg Asn Arg Asn  
 145 150 155

&lt;210&gt; 44285

&lt;211&gt; 150

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (51)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44285

Arg Ala Gln His Pro Ser Ala Cys Arg Ser Ala Ser Leu Ala Ser Arg  
 1 5 10 15  
 Ala His Cys Gly Gln Ala His Ala Cys Ser Thr Gly Lys Ala Pro Ala  
 20 25 30  
 Ser Arg Ser Arg Ala His Ser Ala Arg Leu Arg Pro Pro Gln Pro Pro  
 35 40 45  
 Pro Leu Xaa Arg Ile Leu Ser Val His Asp Ser Gln His Thr Leu Ser  
 50 55 60  
 Ser Val Phe Ser Ala Ala Leu Ser Thr Gln Gln Ser His Ser Pro Gln  
 65 70 75 80  
 Pro His Ser Tyr Pro His Phe Pro Thr Thr Pro Ala His Ala His Arg  
 85 90 95  
 Asn His Thr His Pro Asp Asn Thr His Thr Glu Pro Ser Ser Gln  
 100 105 110  
 Ala Thr Arg Lys Cys Ser Arg Ser Tyr Arg Arg Ile Pro Pro Ala Ile  
 115 120 125  
 Ser Pro Gln Thr Pro Pro Pro His Pro His Pro Pro Asp Pro Arg Ala  
 130 135 140  
 Asp Tyr Pro Pro Ala Ala  
 145 150

&lt;210&gt; 44286

&lt;211&gt; 222

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44286

Gly Arg Thr Gly Ser Lys Gly Gly Arg Val Ser Glu Asn Leu Pro Trp  
 1 5 10 15  
 Leu Asp Trp Met Ala Lys Leu Arg Arg Asp Arg Asn Ser Ser Ala  
 20 25 30  
 Arg Thr His Arg Asn Cys Asn Leu Gln Asn Met Gln Gly Pro Val Thr  
 35 40 45  
 Glu Glu Ile Met Phe Arg Ser Ala Ile Val Leu Leu His Leu Leu Ala  
 50 55 60  
 Lys Asp Thr Pro Gly His Ile Val Phe Val Ala Pro Leu Tyr Phe Gly  
 65 70 75 80



## 20017

Ile	Ala	His	Val	His	His	Phe	Tyr	Glu	Phe	Arg	Leu	Thr	His	Pro	Asp
				85					90					95	
Thr	Ser	Ile	Phe	Ala	Ala	Leu	Phe	Arg	Ser	Val	Phe	Gln	Phe	Gly	Tyr
			100					105					110		
Thr	Thr	Ile	Phe	Gly	Trp	Tyr	Ala	Thr	Phe	Leu	Tyr	Leu	Arg	Thr	Gly
		115					120					125			
Ser	Leu	Leu	Ala	Val	Ile	Val	Ala	His	Ser	Phe	Cys	Asn	Trp	Cys	Gly
	130					135					140				
Leu	Pro	Arg	Leu	Trp	Gly	Arg	Val	Glu	Ala	Ser	Val	Pro	Ile	Gly	Pro
145					150					155					160
Pro	Val	Gly	Lys	Ala	Lys	Glu	Asp	Ala	Asp	Val	Lys	Asp	Ala	His	Ala
			165					170						175	
Ala	Tyr	Gly	Lys	Leu	Gly	Leu	Gly	Trp	Thr	Val	Gly	Tyr	Tyr	Val	Leu
		180					185					190			
Leu	Val	Ser	Gly	Ala	Ile	Ala	Phe	Tyr	Tyr	Ala	Leu	Trp	Pro	Leu	Ser
	195					200					205				
Asp	Ser	Pro	Asn	Ala	Leu	Asp	Thr	Phe	Thr	Gly	Gly	Ser	Lys		
	210					215					220				

&lt;210&gt; 44287

&lt;211&gt; 264

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;220&gt;

&lt;221&gt; UNSURE

&lt;222&gt; (3),(4),(5),(7),(8),(9),(12),(17),(263)

&lt;223&gt; Identity of amino acid sequences at the above locations are unknown.

&lt;400&gt; 44287

Ile	Glu	Xaa	Xaa	Gly	Xaa	Xaa	Xaa	Tyr	Glu	Xaa	Leu	Leu	Ala	Thr
1			5					10					15	
Xaa	Gln	Asp	Pro	Ser	Pro	Ser	Lys	Ser	Gly	Ser	Pro	Arg	Thr	Arg
		20					25					30		Asn
Lys	Pro	Ser	Gln	Ser	Gly	Ser	Arg	Ser	Ser	Gly	Ser	Val	Ala	Asp
		35				40						45		Thr
Arg	Gly	Thr	Gln	Pro	Gly	Ser	Met	Asp	Met	Leu	Glu	Phe	Leu	Thr
	50				55					60				Ser
Pro	Glu	Pro	Ala	Arg	His	Asp	Ala	Glu	Ala	Asn	Thr	Ala	Thr	Leu
65				70				75						80
Ser	Thr	Ser	Ser	Pro	His	Ser	Ile	Thr	Phe	Phe	Asp	Phe	Val	Asn
			85					90					95	Met
Asn	Asn	Pro	Pro	Ser	Met	Leu	Lys	Leu	Thr	Asn	Lys	Glu	Ser	Ile
		100					105					110		Ala
Pro	Asn	Ala	Leu	Thr	Thr	Ile	Leu	Phe	Phe	Met	Trp	Gly	Val	Ala
	115					120						125		Tyr
Gly	Leu	Leu	Asp	Ile	Leu	Asn	Thr	Gln	Phe	Gln	Gln	Ile	Val	Arg
	130				135					140				Leu
Asp	Ser	Trp	Arg	Ser	Leu	Gly	Leu	His	Ala	Val	Tyr	Phe	Gly	Gly
145				150				155						Tyr
Leu	Val	Gly	Pro	Pro	Leu	Val	Gly	Arg	Thr	Val	Leu	Lys	Arg	Trp
			165					170					175	Gly
Phe	Lys	Ser	Thr	Phe	Ile	Thr	Gly	Leu	Cys	Ile	Tyr	Ala	Cys	Gly
		180				185						190		Thr
Leu	Val	Phe	Trp	Pro	Ser	Ala	Val	Leu	Thr	Ser	Tyr	Ser	Ala	Phe
	195					200						205		Thr

## 20018

Ile Ser Asn Phe Ile Val Gly Phe Gly Leu Ala Val Leu Glu Thr Ala  
 210 215 220  
 Ala Asn Pro Phe Ile Ala Leu Cys Gly Pro Leu Glu Asn Ser Glu Ile  
 225 230 235 240  
 Arg Leu Asn Ile Ser Gln Gly Val Gln Ala Ile Gly Ser Val Val Ser  
 245 250 255  
 Pro Leu Leu Ala Lys Lys Xaa Trp  
 260

&lt;210&gt; 44288

&lt;211&gt; 107

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44288

Thr Asn Gly Thr Asn Ser Lys Trp Ala Thr Ala Val Asp Gly Leu Leu  
 1 5 10 15  
 Asn Asn Thr Leu Asp Ile Phe Phe Pro Ala Lys Tyr Gly Gly Asn Ile  
 20 25 30  
 Met Ser Glu Val Leu Cys Glu Pro Asn Glu Val Cys Asn Asp Asn Glu  
 35 40 45  
 Ile Leu Phe Lys Gly Leu Val Thr Ser Trp Leu Ala Phe Thr Ala Leu  
 50 55 60  
 Leu Val Pro Ser Thr Tyr Asp Arg Ile Leu Pro Lys Leu Gln Gly Ser  
 65 70 75 80  
 Ala Val Ala Ala Gly Ala Thr Cys Thr Gly Asn Gly Asn Asn Ser Cys  
 85 90 95  
 Gly Val Arg Trp Tyr Thr Ser Lys Trp Asp Gly  
 100 105

&lt;210&gt; 44289

&lt;211&gt; 65

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44289

Pro Leu Thr Tyr Thr Lys Ile Lys Ile Asn Asn Lys Thr Asn Asn Ser  
 1 5 10 15  
 Pro Pro Ile Phe Thr Lys His Asn His His Gln Thr Lys Asn Pro Asn  
 20 25 30  
 Tyr Ile Gln Gln Pro Asn Ile Ile His Pro Pro Thr Tyr Lys Tyr Ser  
 35 40 45  
 Ile Ile Thr Thr Thr Asn Lys Pro Ile Asn Phe Pro Phe Ser Ile Gln  
 50 55 60  
 Leu  
 65

&lt;210&gt; 44290

&lt;211&gt; 60

&lt;212&gt; PRT

&lt;213&gt; A.fumigatus

&lt;400&gt; 44290

Gln Glu Lys Ser Tyr Pro Leu Asn Pro Ser Ile Ile Thr Pro Leu Lys  
 1 5 10 15  
 Thr Asn Ser Ser Lys Ile Lys Ser Ile Thr Pro Leu Lys Pro Gln Leu

$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$	$\eta$	$\theta$	$\iota$	$\kappa$	$\lambda$	$\mu$	$\nu$	$\xi$	$\omicron$	$\pi$	$\rho$	$\sigma$	$\tau$	$\upsilon$	$\phi$	$\chi$	$\psi$	$\omega$
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

```
<210> 44291
<211> 175
<212> PRT
<213> A.fumigatus
```

```
<210> 44292
<211> 134
<212> PRT
<213> A.fumigatus
```

<400> 44292															
Glu	Gly	Pro	Val	Gly	Trp	Lys	Gly	Asn	Pro	Phe	Ile	Thr	Thr	Glu	Gly
1				5					10					15	
Gly	Ile	Lys	Gly	Gly	Val	Leu	Cys	Gly	Gly	Gly	Lys	Gly	Asp	Ser	Ser
			20					25					30		
Gly	Gly	Glu	Phe	Gly	Gly	Arg	Leu	Gly	Glu	Asn	Cys	Asn	Gln	Lys	Asp
		35					40					45			
Glu	Gly	Ala	Gly	Lys	Thr	Arg	Gly	Gly	Asn	Ser	Ser	Gly	Ser	Glu	Glu
	50					55					60				
Glu	Arg	Asn	Arg	Arg	Glu	Gly	Gly	Lys	Arg	Trp	Glu	Thr	His	Pro	Arg
65					70					75				80	
Gly	Arg	His	Ala	Asp	Ser	Arg	Asn	Gln	Trp	Arg	Cys	Gly	Asp	Ser	Arg
				85					90					95	
Arg	Ile	Cys	Ser	Phe	Leu	Gly	Gly	Lys	Lys	Phe	Leu	Leu	Trp	Ser	Ser
			100					105					110		
Arg	Arg	Glu	Ser	Phe	Gly	Pro	Lys	Ile	Ser	Leu	Val	Cys	Thr	Gly	Phe